Silicon Valley
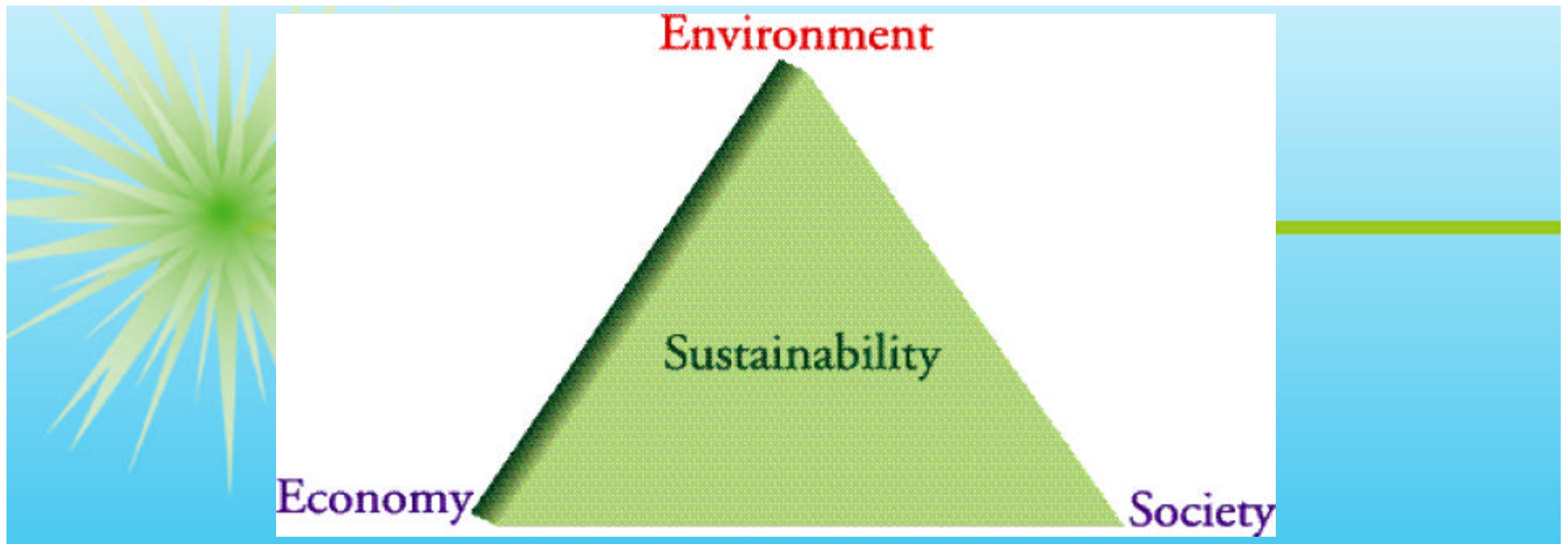
Taking the Pulse of Silicon Valley's Environment

1999 Environmental Index

SILICON VALLEY
ENVIRONMENTAL PARTNERSHIP

Silicon Valley

Environmental Indicators

Silicon Valley

Environmental Indicators

BACKGROUND/PROCESS

NEETF Survey

Majority of Americans are
supportive of environment,
lack of adequate knowledge.

Indicators

ENVIRONMENTAL
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Environmental Indicators

PROCESS

Board of Directors: Framework

Advisors: Strategic oversight
- environmental
- scientific
- business
- government
- academia

2-year updates planned

ENVIRONMENTAL PARTNERSHIP

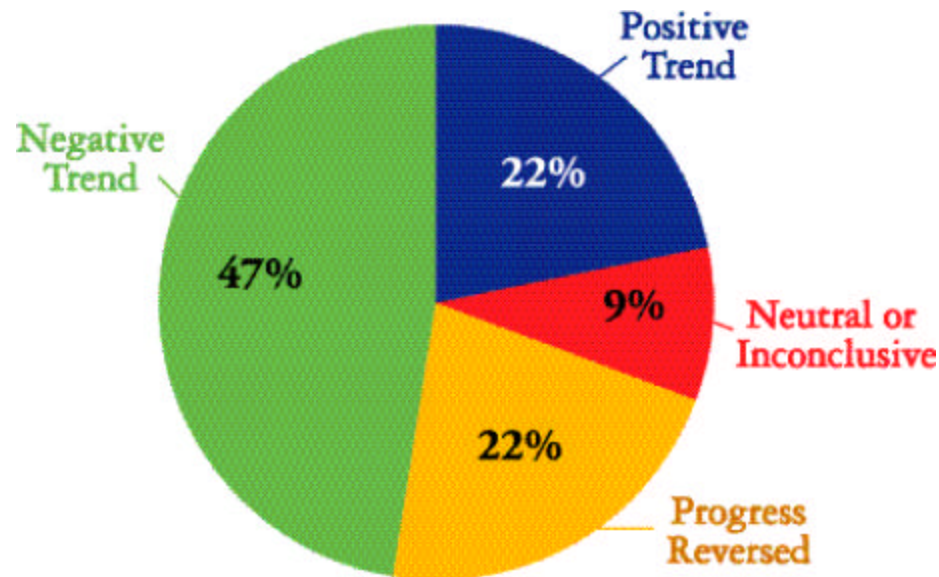# Silicon Valley

Environmental Indicators

Criteria for Indicators:

- influence
- ecologically meaningful
- understandable
- practical
- representative
- sensitive
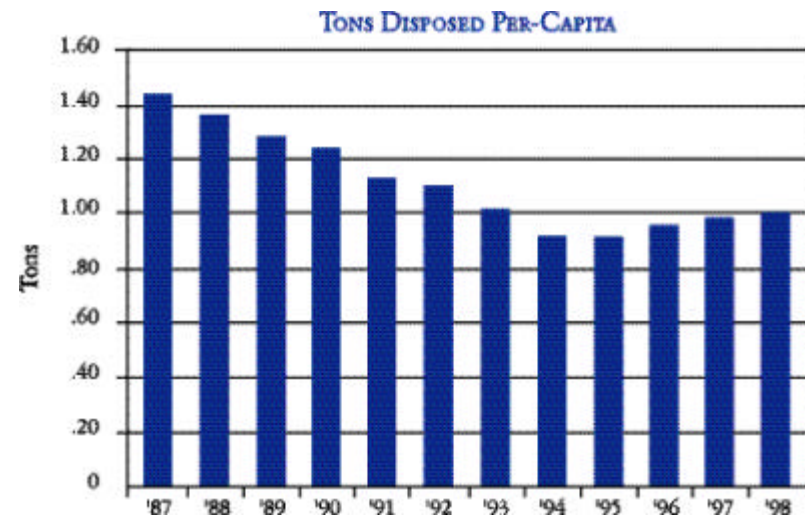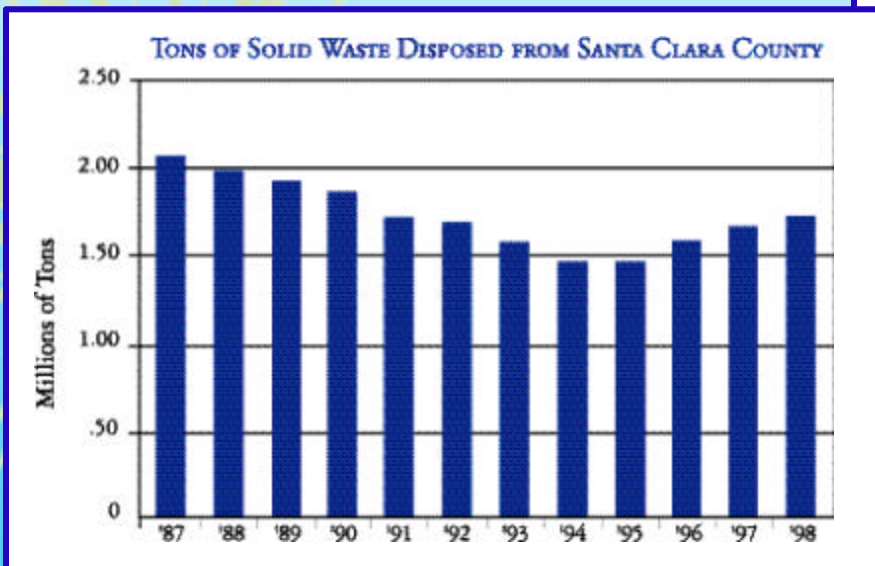- detect trends
- reflect general agreement

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PROCESS

Positive Trend 22%

Negative Trend 47%

Neutral or Inconclusive 9%

Progress Reversed 22%

2/3 show negative trends

8

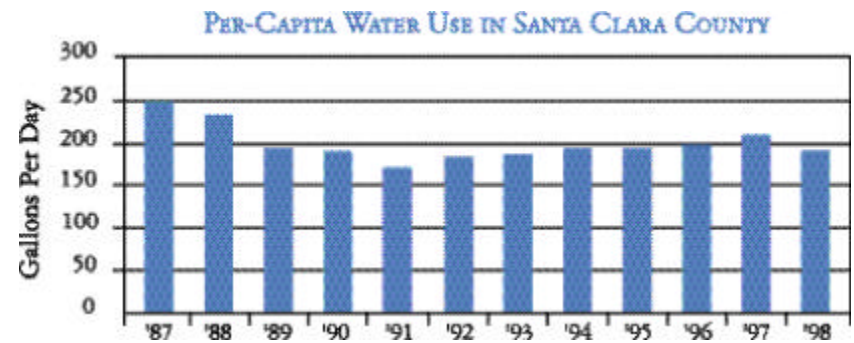ENVIRONMENTAL PARTNERSHIP
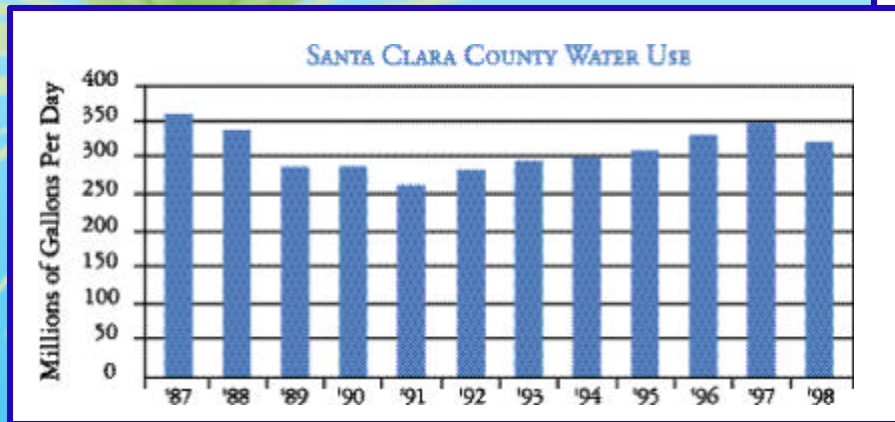
Silicon Valley
Environmental Indicators

Data Source: Santa Clara County Integrated
Waste Management Program
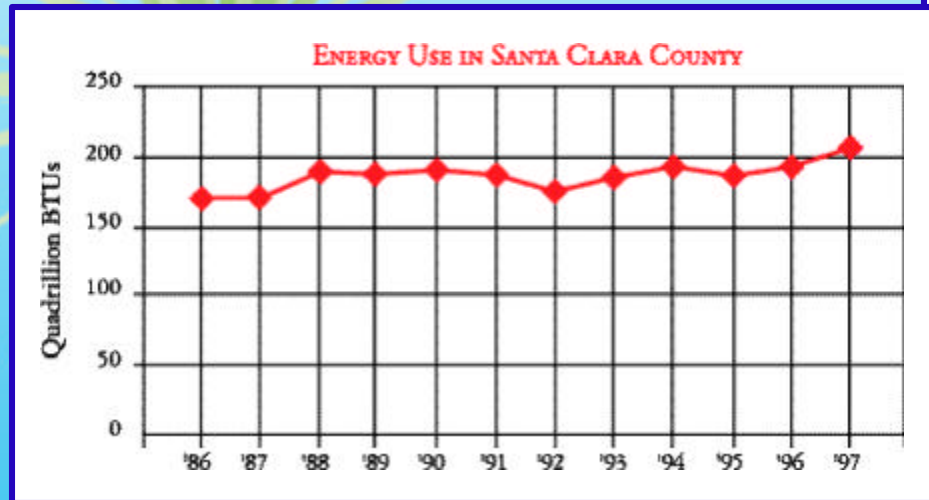
Silicon Valley

Environmental Indicators

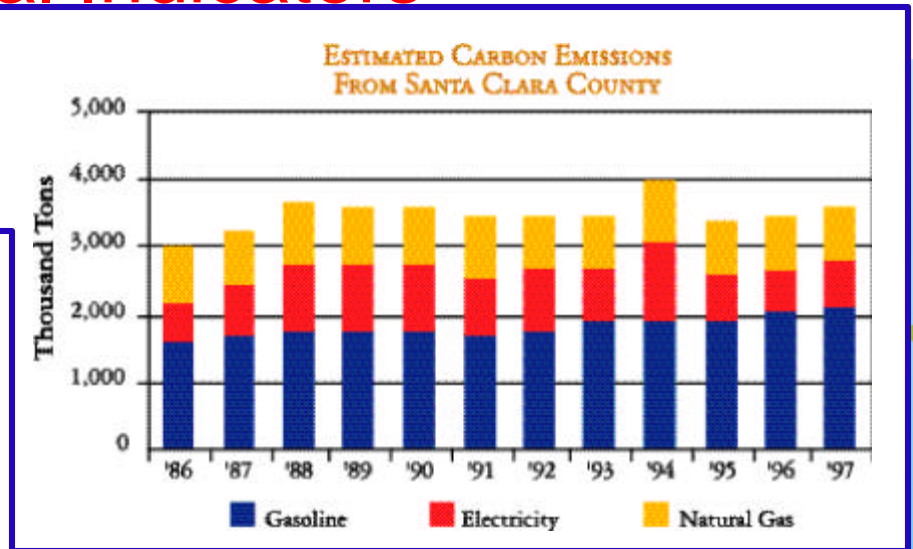Data Source: Santa Clara Valley Water District

Silicon Valley

Environmental Indicators

ENERGY USE IN SANTA CLARA COUNTY

Data Sources: California Energy Commission
and California Department of Transportation
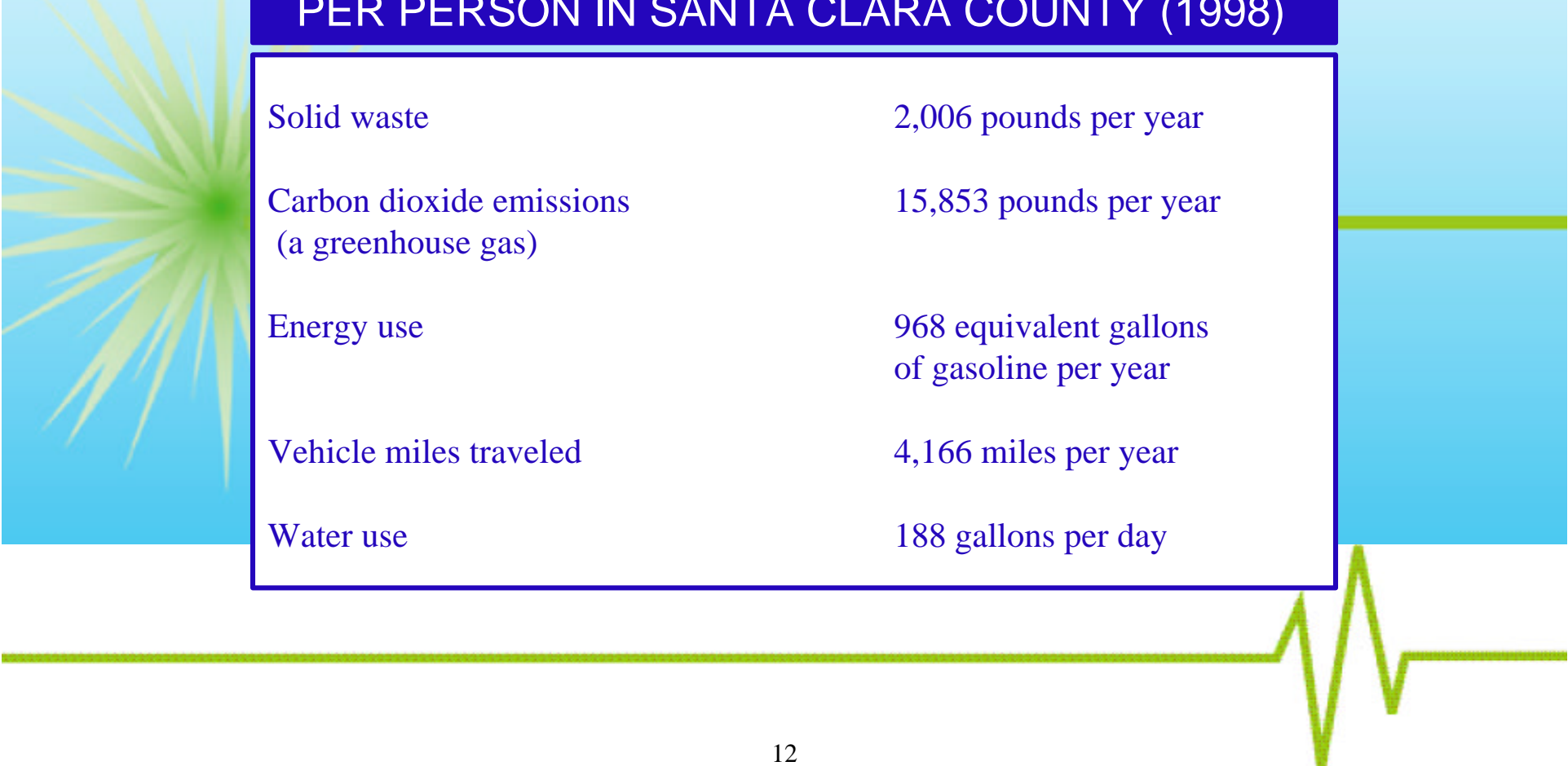
ESTIMATED CARBON EMISSIONS
FROM SANTA CLARA COUNTY

Data & Conversion Factor Sources: California
Energy Commission, California Department of
Transportation, U.S. Department of Energy

11

ENVIRONMENTAL
PARTNERSHIP

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Environmental Indicators

PER PERSON IN SANTA CLARA COUNTY (1998)
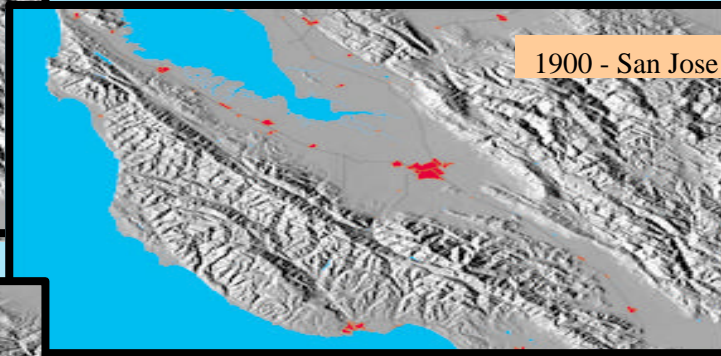
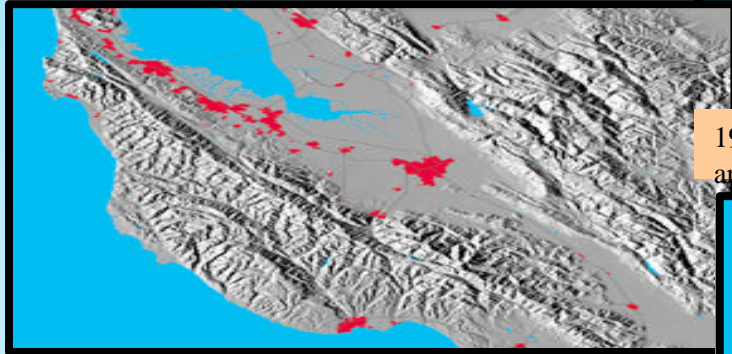|	
Solid waste	2,006 pounds per year
Carbon dioxide emissions (a greenhouse gas)	15,853 pounds per year
Energy use	968 equivalent gallons of gasoline per year
Vehicle miles traveled	4,166 miles per year
Water use	188 gallons per day

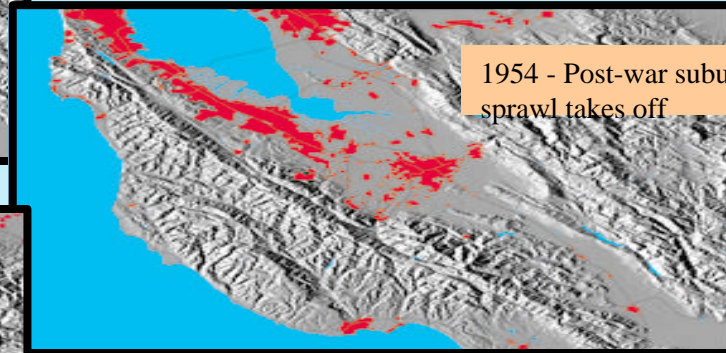# South Bay Sprawl: 1850 – 1996
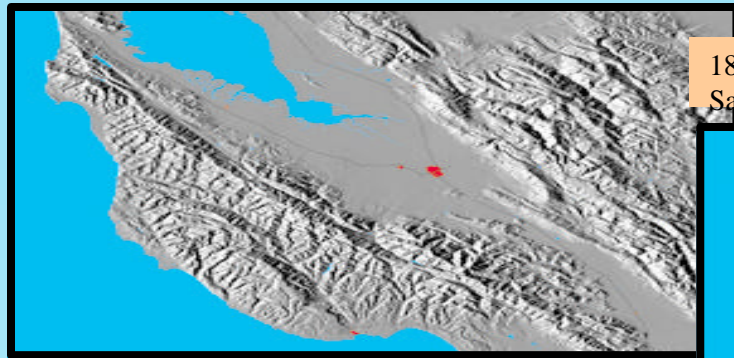
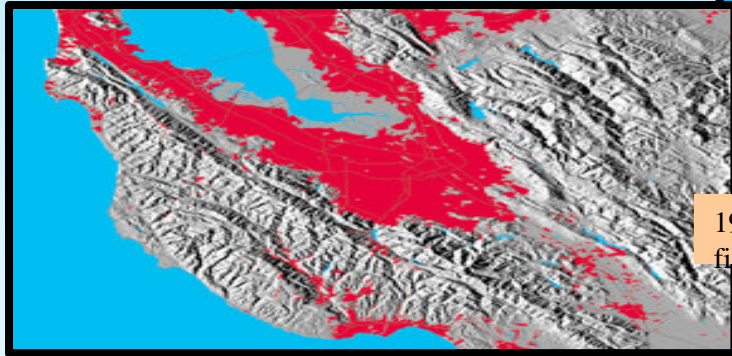1850 - Small outposts around San Francisco Bay

1900 - San Jose emerges

1940 - Suburbs build up around core cities

1954 - Post-war suburban sprawl takes off

1996 - Explosive growth fills the central flats

Data Source: U.S. Geological Survey
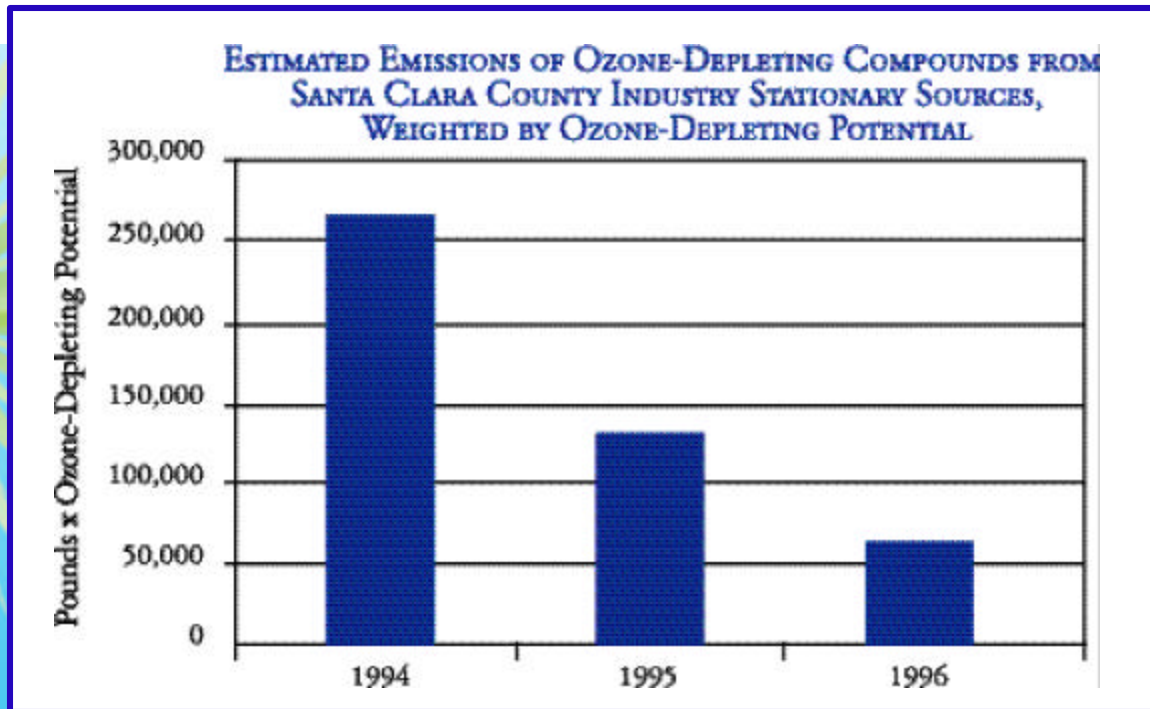
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Environmental Indicators
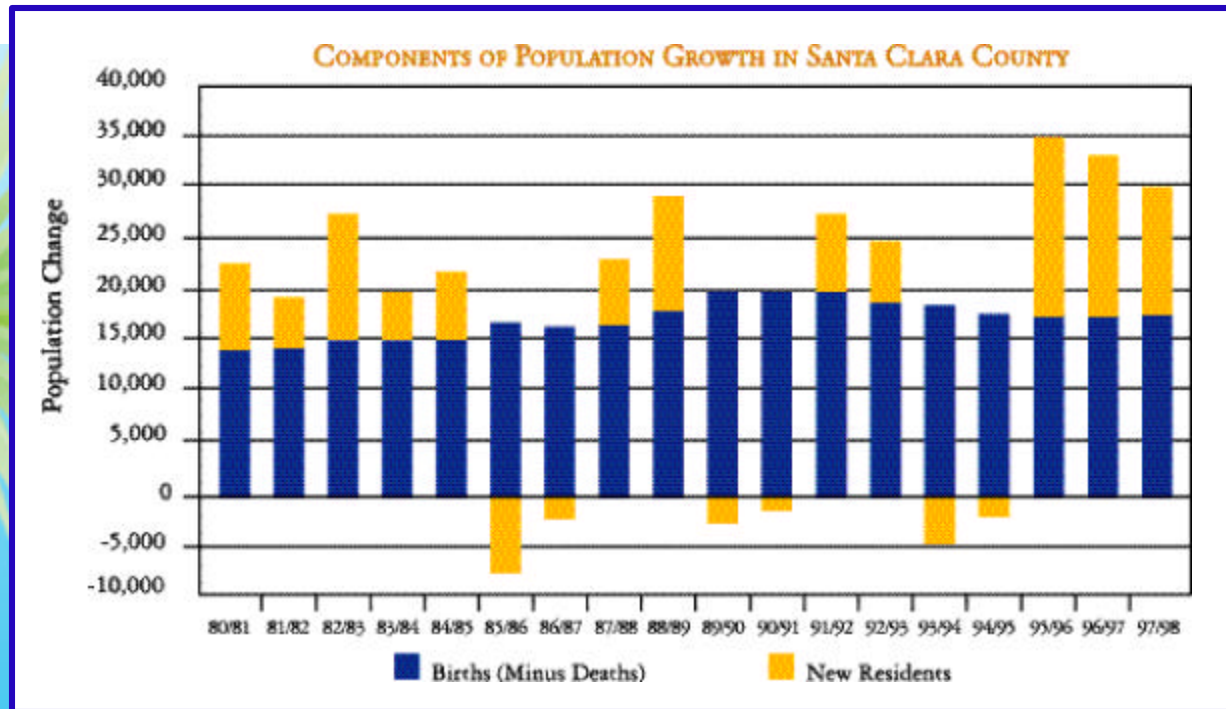
Data Source: California Department of Finance, Demographic Research Unit

14

Silicon Valley

Environmental Indicators

ESTIMATED EMISSIONS OF OZONE-DEPLETING COMPOUNDS FROM SANTA CLARA COUNTY INDUSTRY STATIONARY SOURCES, WEIGHTED BY OZONE-DEPLETING POTENTIAL

Emission Data Source: Bay Area Air Quality Management District

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Environmental Indicators

POUNDS OF PESTICIDES USED IN SANTA CLARA COUNTY
(EXCLUDES RESIDENTIAL USE)

Most Toxic — Other Pesticides

Data Source: California Department of Pesticide Regulation

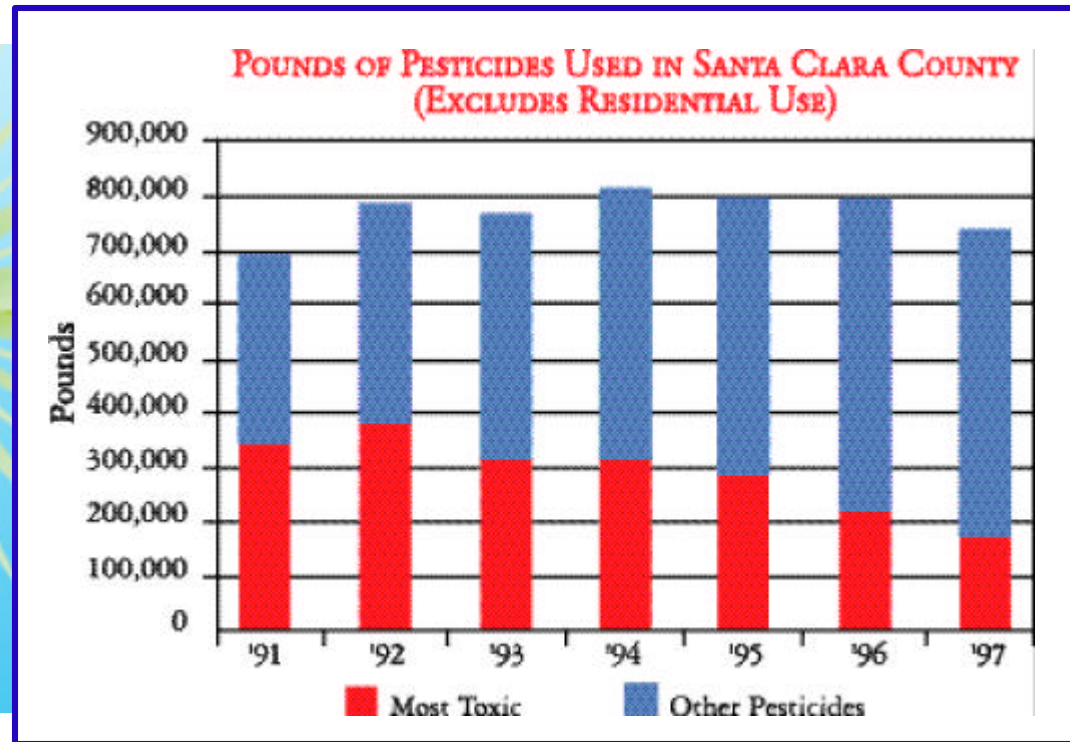ENVIRONMENTAL PARTNERSHIP

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Environmental Indicators

Data Source: Bay Area Air Quality Management District

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Environmental Indicators
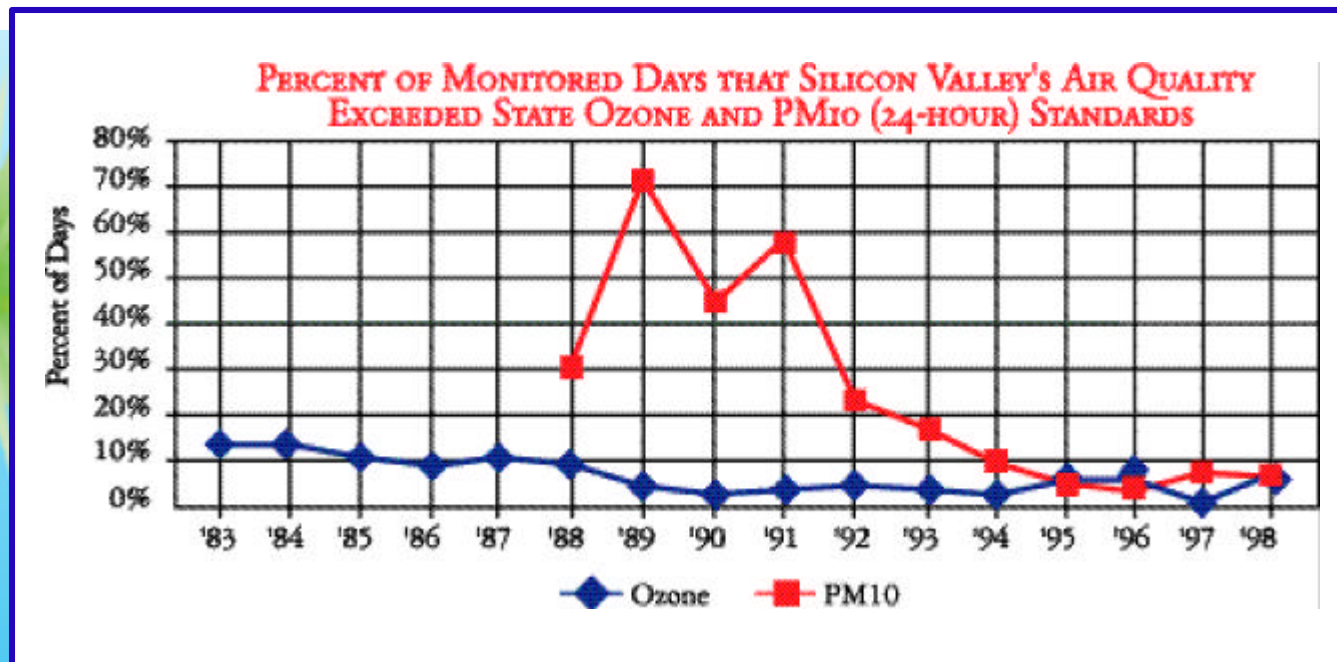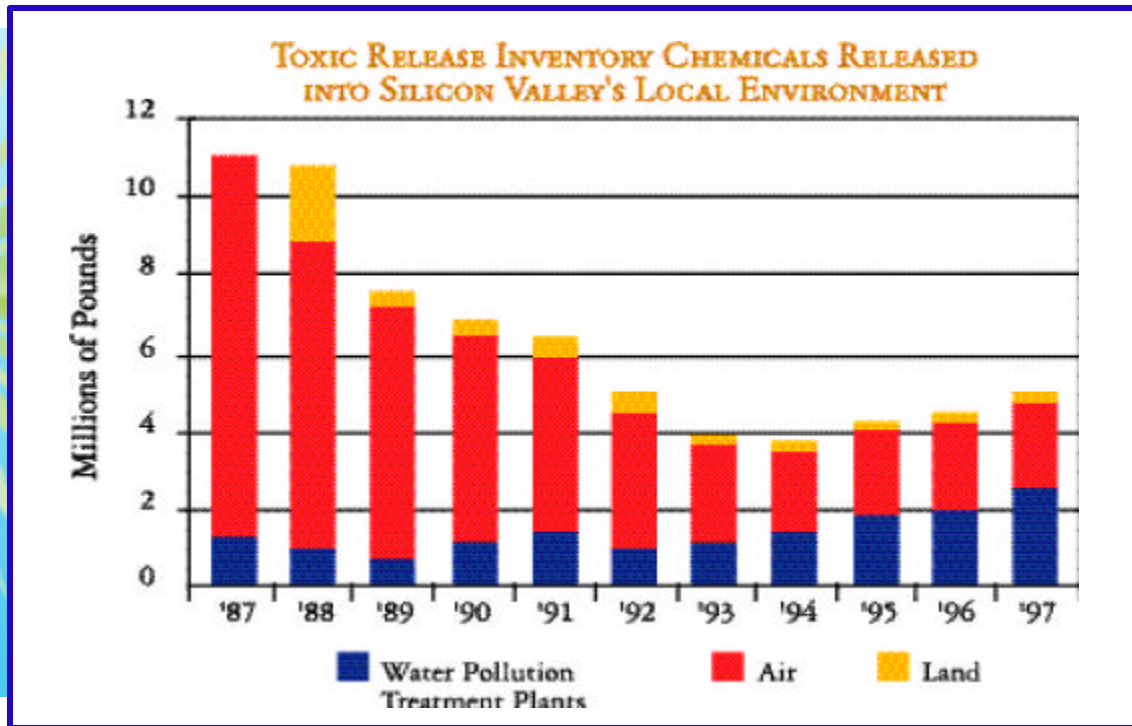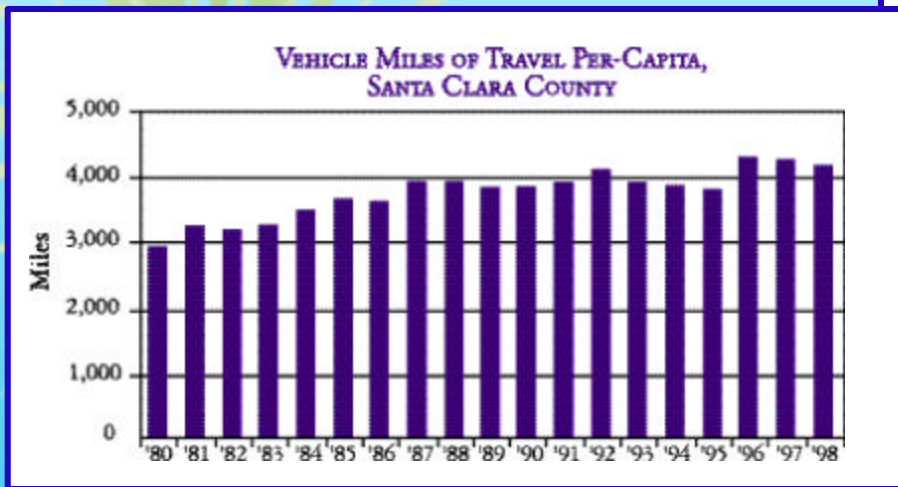

Data Source: U.S. Environmental Protection Agency

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Environmental Indicators

VEHICLE MILES OF TRAVEL PER-CAPITA, SANTA CLARA COUNTY

Data Source: California Department of Transportation,
Transportation System Information Program
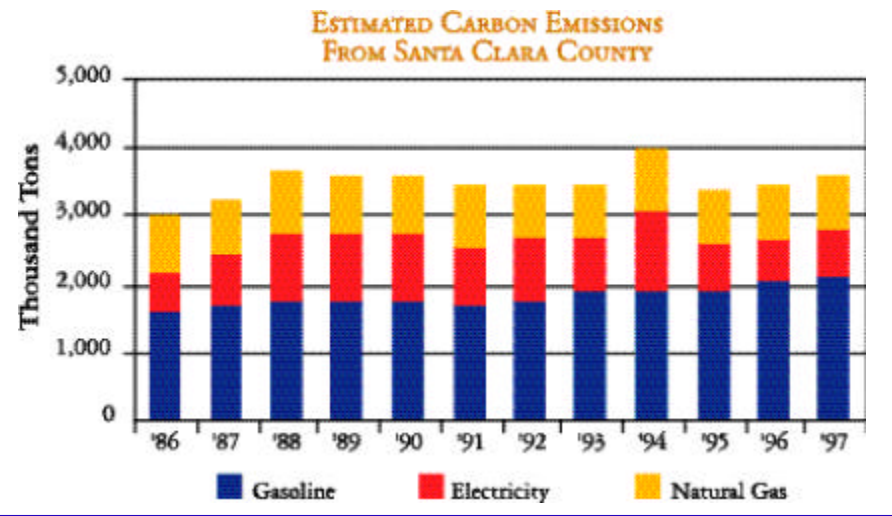
ESTIMATED CARBON EMISSIONS FROM SANTA CLARA COUNTY

Gasoline   Electricity   Natural Gas

Data & Conversion Factor Sources: California Energy
Commission, California Department of Transportation,
U.S. Department of Energy

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Environmental Indicators

SOUTH BAY WETLANDS: PAST AND PRESENT ACRES

Legend:
- Other Baylands (green)
- Tidal Flat (yellow)
- Salt Pond (red)
- Tidal Marsh (blue)

X-axis: Historical, Present (circa 1997)
Y-axis: Acres (0 to 90,000)
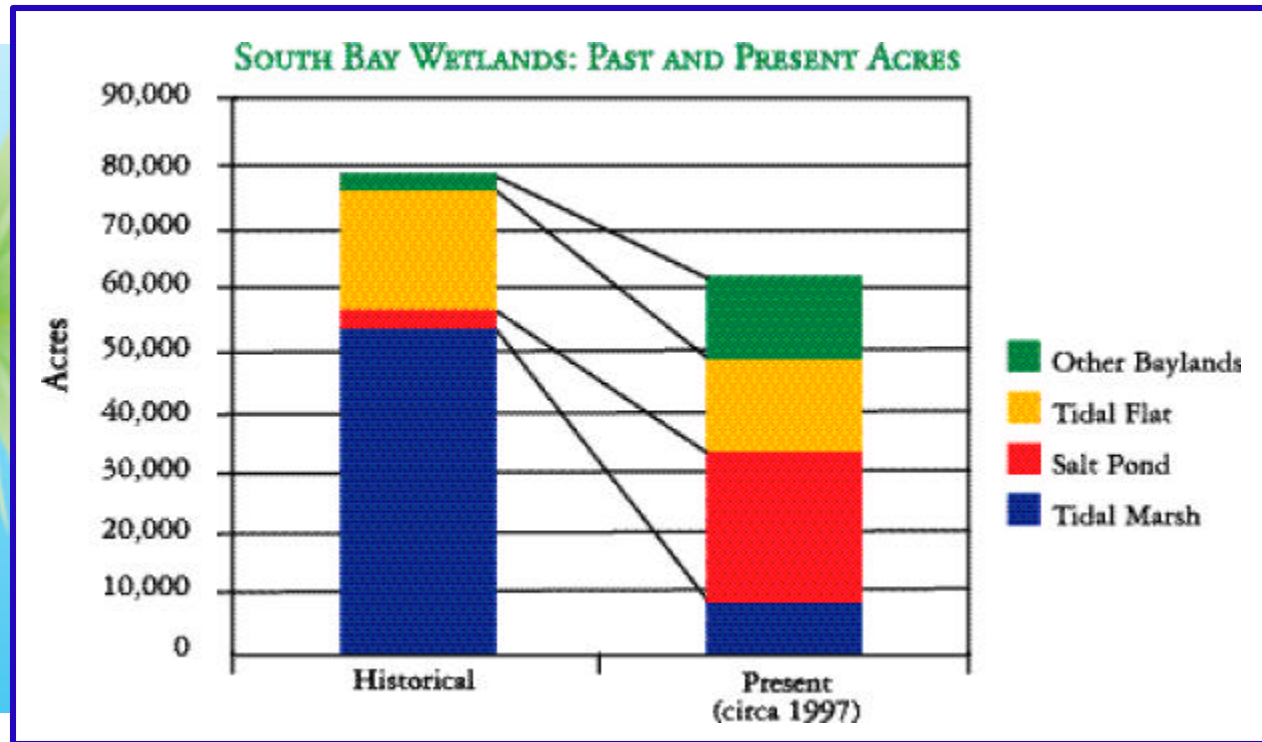
Data Source: San Francisco Bay Area Wetlands Ecosystem Goals Project

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Environmental Indicators
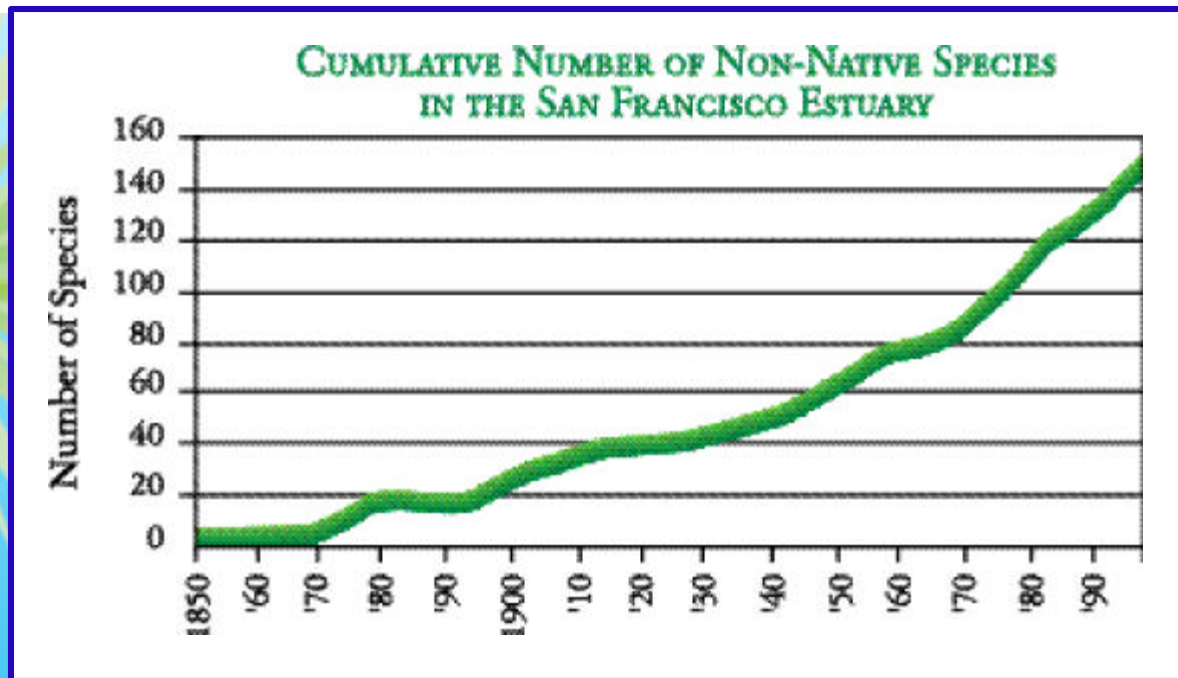
Data Source: Andrew N. Cohen and James T. Carlton
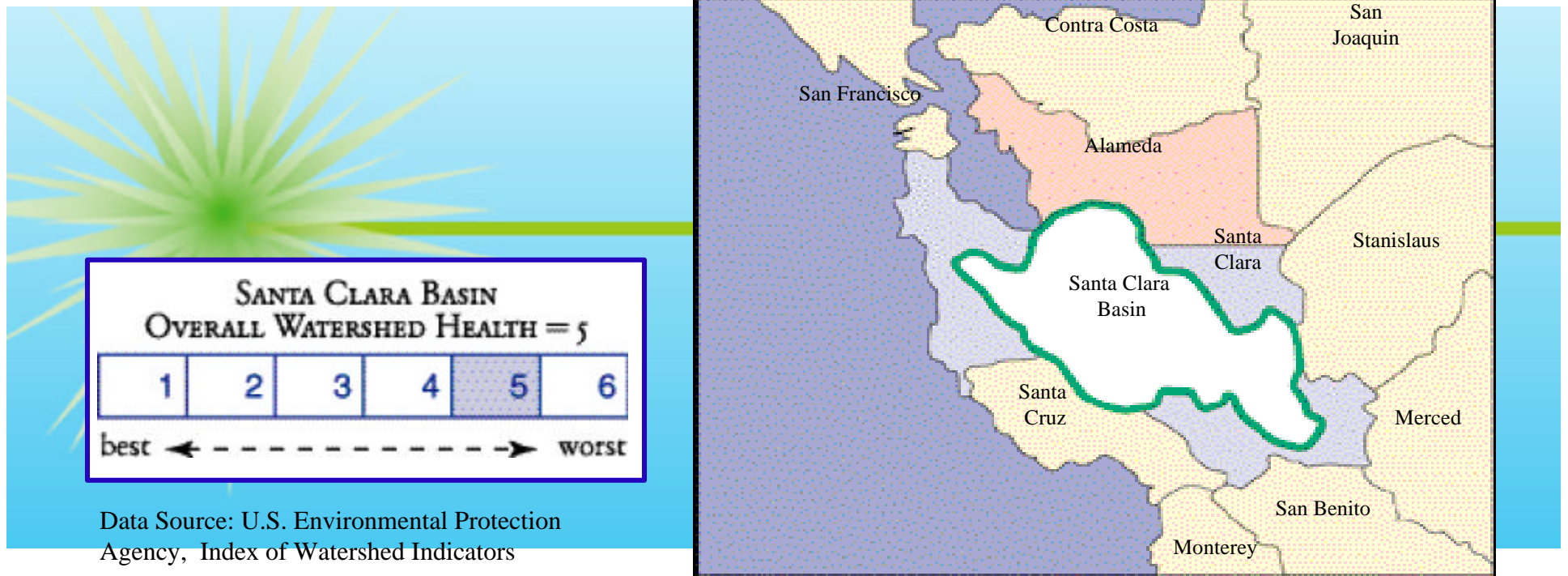
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Environmental Indicators

SANTA CLARA BASIN
OVERALL WATERSHED HEALTH = 5

1	2	3	4	5	6

best ← - - - - - - - - → worst

Data Source: U.S. Environmental Protection
Agency, Index of Watershed Indicators

Marin
Contra Costa
San Joaquin
San Francisco
Alameda
Santa Clara
Stanislaus
Santa Clara Basin
Santa Cruz
Merced
San Benito
Monterey

22

Silicon Valley

Environmental Indicators

Challenges for the California:

- Identifying stakeholders

- Concurrence - criteria, issues, measures, etc.

- Simplicity and complexity

23

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Environmental Indicators

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